

USSR/Pharmacology. Toxicology. Antibiotics:

V

Abs Jour: Ref. Zhur. - Biol., No 22, 1958, 102998

Author : Sayko, B. A.

Inst : -

Title : The Effectiveness of Synthomycin and Levomycetin  
Application in Treatment of Patients With Severe  
Forms of Diphtheria.

Orig Pub: Sov. meditsina, 1958, No. 3, 113-114

Abstract: No abstract

Card 1/1

SAYKO, K. I.

Prevention of complications in active therapy of psychoses.  
Med. sestra, Moskva no.10:22-25 Oct. 1950. (CIML 20:1)

1. Of the Hospital imeni Solov'ev (Head Physician -- V. D. Denisov; Head of Division -- A. M. Chumusova) and of the Division of Experimental Therapy of Psychoses (Director -- V. A. Gilyarovskiy, Active Member of the Academy of Medical Sciences USSR; Head of Division -- I. I. Lukomskiy).

SIDOROV, N.Ye., kand. tekhn. nauk.; SAYKO, N.I.

Possibilities for decreasing fuel consumption in the production  
of cast iron. Met. i gornorud. prom. no.6:10-12 N-D '64.

(MIRA 18:3)

EXCERPTA MEDICA Sec 5 Vol. 10/10 Pathology Oct 57

3118. SAYKO N.N. Odessa. \*Die Anwendung markierter Atome bei der Untersuchung der Schrankenfunktionen im Organismus. The use of isotopes for the study of barrier functions in the organism ZBL. ALLG. PATH. PATH. ANAT. 1956, 95/11 (535-540) Graphs 4 Tables 1  
After i.v. administration of  $P^{32}$ ,  $I^{131}$  and  $S^{35}$ -labelled penicillin the appearance of the isotopes in the CSF, the aqueous humour and the synovial fluid was studied. The haemato-ophthalmic barrier proved more permeable in the foetal period and in the disturbed neuro-trophical state following dissection of the trigeminal nerve. The haemato-encephalic barrier was found enhanced after stimulation of the sciatic nerve.  
Romhányi - Pécs (V, 2\*)

GOLSVANOVA, S., kand. biol. nauk; YEGOROVA, I., nauchnyy sotrudnik;  
 KHALILOV, B., kand. biol. nauk; SAMEDOV, I., mladshiy nauchnyy  
 sotrudnik; VEDERNIKOV, N., starshiy nauchnyy sotrudnik; SAYKO, ...;  
 CVRILISHVILI, V.A., aspirant; DUTSOF, G., aspirant; ZHUKOVA, L.,  
 fitopatolog

From practices in the use of poisonous chemicals. Zashch. rast ot  
 vred. i bol. 10 no.1:21-24 '65. (MIRA 18:3)

1. Vsesoyuznyy institut zashchity rasteniy (for Golovanova, Yegorova).
2. Azerbaydzanskiy institut zashchity rasteniy, Kirovabad (for  
 Khalilov, Samedov).
3. Tatarskaya lesnaya opytная stantsiya,  
 Kazan' (for Vedernikov).
4. Zaveduyushchiy otdelom zashchity  
 rasteniy Ternopol'skoy opytной stantsii (for Sayko).
5. Gruzinskiy  
 institut zashchity rasteniy (for Gvishvili).
6. Tadzhikskiy  
 nauchno-issledovatel'skiy institut sel'skogo khozyaystva (for Dutsuf).
7. Donetskaya sel'skokhozyaystvennaya opytная stantsiya (for Zhukova).

L 01936-67

ACC NR: AP6030913

SOURCE CODE: UR/0018/66/000/009/0023/0023

AUTHOR: Golofast, G. (Brigadier general); Sayko, V. (Colonel);  
Timoshenko, A. (Colonel); Spuskanyuk, G. (Colonel); Poletayev, A.  
(Lieutenant colonel)

ORG: none

TITLE: Motorized rifle battalion in defensive operations

SOURCE: Voyennyy vestnik, no. 9, 1966, 23 and pages 26-37

TOPIC TAGS: military operation, ground force tactic, artillery  
weapon, military tank, military training

ABSTRACT: The authors discuss the defensive capability of a motorized  
rifle battalion in modern warfare. The plan of organization for  
defense is analyzed under conditions of direct contact with the enemy.  
Problems are discussed concerning the engineering support of the bat-  
talion defense area and the military operations for repelling the  
attacks of military tanks and infantry subunits. The duties of the  
battalion commander, battalion commanding personnel, and artillery bat-  
talion commander are analyzed in detail for a concrete tactical plan.  
Orig. art. has: 2 figures and 1 table. [NT]

SUB CODE: 15/ SUBM DATE: none/

Card 1/1 hs

1. SAYKO, V. A.
2. USSR (600)
4. Hospitals
7. Personal regimen for a patient. Sov. med. 16 no. 12 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

SAYKO, V.A.

Certain peculiarities in the clinical aspect of typhus; author's report.  
Zhur.mikrobiol.epid.i immun. no.9:20-21 S '53. (MIRA 6:11)  
(Typhus)



SAYKO, V.A.(Pyatigorsk)

~~Microdoses of calcium chloride for treating serum sickness.~~  
Klin. med., 33 no.10:84 0 '55. (MIRA 9:2)

1. Iz diagnosticheskogo otdeleniya (sav. V.A. Sayko) Pyatigorskoy  
infektsionnoy bol'nitsy.  
(ANAPHYLAXIS) (CALCIUM CHLORIDE)

SAYKO, V. A.

SAYKO, V. A.

Course of rubella complicated by meningo-encephalitis; abstract.  
Pediatrista 40 no.1:63 Ja '57. (MIRA 10:10)

1. Iz diagnosticheskogo otdeleniya (zav. - V.A.Sayko) Pyatigorskoy  
infektsionnoy bol'nitsy (glavnyy vrach O.A.Sokolova)  
(RUBELLA) (MENINGITIS) (BRAIN--INFLAMMATION)

SAYKO, V.A.

Effectiveness of synthomycin and levomycin in the treatment of severe forms of diphtheria. Sov.med. 22 no.3:113-114 Kr '58. (MIRA 11:4)

1. Iz diagnosticheskogo otdeleniya (zav. V.A.Sayko) Pyatigorskoy infektsionnoy bol'nitsy (glavnyy vrach O.A.Sokolova)

(DIPHTHERIA, ther.

chloramphenicol in severe forms (Rus))

(CHLORAMPHENICOL, ther. use

diphtheria, severe forms (Rus))

LEVENBERG, A.Ye., inzh.; SAYKOV, A.V., inzh.; KRASNITSKIY, M.V., inzh.

Constructing a precast reinforced concrete arch bridge.  
Transp.stroi. 10 no.1:7-10 Ja '60. (MIRA 13:6)  
(Voronezh--Bridges, Concrete)

S/186/60/002/001/011/022  
A057/A129

AUTHORS: Preobrazhenskiy, B.K.; Saykov, Yu.P.

TITLE: Ion-exchange separation of a group of elements. III. Elements of the copper group

PERIODICAL: Radiokhimiya, v. 2, no. 1, 1960, 68 - 72

TEXT: In continuation of previous studies ion-exchange separation of the elements Hg, Bi, Cd, Pb and Cu on sulfo-styrene cation exchange resin of the KY-2 (KU-2) type was investigated, using nitric acid or hydrochloric acid as elutriant. Under the given conditions the platinum metals are not absorbed from nitric acid solution: by the cation exchanger. Systematic investigations are important for the development of separation techniques for radioisotopes from complex mixtures, as well as for obtaining carrier-free isotopes. Separation of some of the metals of the copper group was already investigated by other authors: by Yu.Yu. Lur'ye and N.A. Filippova [Ref. 1: Zav. lab., 14, 159 (1948)], R. Klement and H. Sandmann [Ref. 2: Z. analyt. Chem., 145, 325 (1955)], K. Kraus and F. Nelson [Ref. 3: J. Am. Chem. Soc., 76, 5916 (1954)], D.I. Tyabchikov, V.Ye. Bukhtiyarov [Ref. 5: ZhAKh, 7, 377 (1952)], or chromatographic separation of platinum elements by

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Ion-exchange separation of a group of elements....

S/186/60/002/001/011/022  
A057/A129

S. Berman [Ref. 5: Canad. J. Chem., 36, 835, 845 (1958)], and D. Rees-Evans et al. [Ref. 6: Analyse, 83, 356 (1958)]. But the present paper reports first a separation method for the whole copper group. In order to obtain carrier-free elements in the present experiments no salt solutions were used for the washing-out process. Hydrochloric acid was used as complex-forming agent, because many of the corresponding stability constants were known. Cation exchange resin was used, because of the strong adsorbability of some of the chloride complexes (Hg, Bi) on anion exchange resins. The capacity of the used KU-2 cation exchange resin was 4.7 mg equiv/g, containing about 6% divinylbenzene. The  $H^+$  form was used and a particle size of about  $20\mu$ . Column elution techniques were used with columns of 2 mm in diameter, 70 - 100 mm long and flow rate 1 drop/0.5 - 1 min. The column was washed out with 0.5 M  $HNO_3$  solution (to remove  $Cl^-$  ions), and then 0.1 M  $HNO_3$  containing the investigated elements was passed into the column. First the behavior of the single elements was investigated (see Table). It was observed that platinum elements are not adsorbed from 0.5 M  $HNO_3$  and thus easily can be separated. Further separation in this group can be done by the methods reported in Reference 5 or 6. The elements adsorbed on the KU-2 exchanger are selectively washed out. The present authors give an example of separation of primarily separated elements from a complex mixture obtained by irradiation of bismuth with

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Ion-exchange separation of a group of elements....

S/186/60/002/001/011/022  
A057/A129

protons (see Fig.). Similar practice can be applied to analytical purposes. With columns of about 10 cm long the maximum content of each element ensuring satisfactory separation is 10 mg/cm<sup>2</sup> of the column cross section. Removal of elements from the cation exchange resin occurs due to the selective formation of neutral and anion chloride complexes, which are not retained by the exchange resin. Thus S.A. Shchukarev et al. [Ref. 9: Uch. zap. LGU, 211, 17 (1957)] determined different stability constants of cadmium chloride complexes. Also formation of neutral complexes is important, especially at low chloride concentration, stimulating the removal of the element from the exchange resin. Copper is apparently removed by simple displacement with H-ions. This is in the present case an unpleasant side effect, which can be probably decreased by adding an organic solvent. In the present method this is not necessary because high hydrochloric acid concentrations are not needed. The investigated elements form also neutral and anionic complexes with HBr [Ref. 7: K.B. Yatsimirskiy, V.P. Vasil'yev, konstanty nestoykosti kompleksnykh soyedineniy (Instability Constants of Complexes), Izd. AN SSSR, M. (Ed. by AS USSR) (1959)], which are not retained by cation exchange resins. Thus probably HBr solutions can also be used for selective elution of these elements from cation exchange resin. There are: 1 figure, 1 table and 9 references: 5 Soviet-bloc and 4 non-Sviet-bloc.

SUBMITTED: May 25, 1959

Card 3/5

L 17371-66 EWT(m)/EWP(t) DIAAP/IJP(c) JD  
ACC NR: AP6004509 SOURCE CODE: UR/0186/65/007/005/0631/0632

AUTHOR: Murin, A. N.; Nefedov, V. D.; Kirin, I. S.; Grachev, S. A.; Gusev, Yu. K.;  
Saykov, Yu. P.

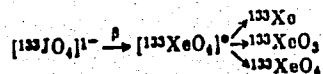
ORG: none

TITLE: Formation of oxygen-xenon compounds during  $\beta$ -radiation of  $I^{133}$  incorporat-  
ed in potassium periodide 27 27 19 39 B 79

SOURCE: Radiokhimiya, v. 7, no. 5, 1965, 631-632

TOPIC TAGS: xenon, oxide formation, beta radiation, iodine, radioisotope

ABSTRACT: Xenon oxides ( $XeO_4$  and  $XeO_3$ ) were prepared by  $\beta$ -radiation of potassium periodide containing radioactive  $I^{133}$  isotope according to the following scheme:



The preparation procedure was as follows: helium gas was bubbled for 30 minutes at

UDC: 541.28 : 546.295

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L 17371-66

ACC NR: AP6004509

0

a rate of 26 ml/min through a solution of  $KJ^{133}O_4$  and  $KJ^{133}$  in 0.002 normal  $H_2SO_4$  to remove free xenon. The elemental iodine was removed from the gas stream by passing helium through a KOH-absorber. The xenon oxides were trapped on AG-5 activated carbon at liquid nitrogen temperature. The quantity of trapped xenon-133 was measured using an AI-100-1 analyzer. It was found that  $XeO_4$  is unstable in acidic media and decomposes to  $XeO_3$ . [Editor's note: J is the Russian periodic symbol for iodine.]

SUB CODE: 07/

SUBM DATE: .08Jan65/

ORIG REF: 002/

OTH REF: 005

Card 2/2 nst

L 25966-66 EWT(m)/ETC(f)/EPF(n)-2/EMG(m) IJP(c) WW

ACC NR: AP5026440

SOURCE CODE: UR/0089/65/019/004/0350/0354

AUTHOR: Ganzha, V. D.; Yegorov, A. I.; Kaminker, D. M.; Kolyadin, A. B.  
Konoplev, K. A.; Saykov, Yu. P.; Sharov, V. T.

ORG: none

TITLE: Electrophoretic filter for reactor water purification

SOURCE: Atomnaya energiya, v. 19, no. 4, 1965, 350-354

TOPIC TAGS: nuclear research reactor, nuclear reactor ~~operation~~, water purification equipment, ~~water cooled nuclear reactor~~, industrial filter, electrophoresis, corrosion, stainless steel / VVR-M nuclear reactor, 1Kh18N9T stainless steel

ABSTRACT: In January, 1962, a formation of turbidity in the primary loop of the VVR-M reactor of the Physicotechnical Institute im. A. F. Ioffe, AN SSSR, was observed. In June, the turbidity was so strong that a special electrophoretic filter for water purification was installed. The turbid water contained a 54-ppt suspension of hydrate aluminum oxide which was originated by the corrosion of aluminum reactor vessel and fuel-element cans. A daily amount of about 2 g/Mw of suspended particles was discharged into the water. The installed filter was equipped with the platinized titanium anodeplates, while the cathode

UDC: 621.039.568

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L 25966-66

ACC NR: AP5026440

plates were made of 1 18 9T stainless steel. A cylindrical prototype of the filter was experimentally tested and the results were explained and graphically illustrated. The tests showed that the chemical composition of turbid and filtered water was as follows:

|                                        | <u>Turbid</u> | <u>Filtered</u> |
|----------------------------------------|---------------|-----------------|
| Al <sub>2</sub> O <sub>3</sub> in m/kg | 3.0           | 0               |
| Fe <sup>+</sup> 3 " "                  | 0.4           | 0.18            |
| SiO <sub>2</sub> " "                   | 6.0           | 1.3             |
| O <sub>2</sub> " "                     | 0.96          | 2.96            |
| Optical density                        | 0.065         | 0.008           |

The selected filter design data are summarized in the following table:

|                                    |             |
|------------------------------------|-------------|
| Water flow rate in kg/hr           | 250-500     |
| Effective water flow in ou m/hr    | 0.5         |
| Electrode voltage in v             | 110-220     |
| Distance between electrodes in cm  | 1           |
| Contact time in min. (at 250 l/hr) | 2           |
| Total filter volume in liter       | 10.7        |
| Interelectrode volume in liter     | 7.5         |
| Electrode size in mm               | 170x572     |
| Number of anode plates             | 4           |
| Number of cathode plates           | 5           |
| Filter dimensions in mm            | 400x224x935 |

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L 25966-66

ACC NR: AP5026440

The filter has a small hydraulic resistance and needs only about 0.5 kw for its operation. A flow diagram represents schematically the circulation of water in the primary loop of the reactor. Another figure shows a photo of the electrophoretic filter which was successfully used for purifying water in the VVR-M reactor. The authors express their gratitude to Academician B. P. Konstantinoff for his continuous interest. Expressions of thanks are also given to V. P. Rodzevich (for apparatus design), V. D. Trenin and R. N. Rodionov (for analysis) and to D. A. Yashin and B. S. Razov for their assistance. Orig. art. has: 2 tables and 6 figures.

SUB CODE: 18/13 / SUBM DATE: 4July64 / ORIG REF:001 / OTH REF:002

Card 3/3 FID

L 28844-66 EPF(n)-2/EWT(m)/ETC(f)/ENG(m)/EWP(t)/ETI LJP(c) VM/JD/WB

ACC NR: AP6013738 SOURCE CODE: UR/0089/66/020/004/0356/0357

AUTHOR: Saykov, Yu. P.; Isupov, V. K.

ORG: none

TITLE: Accumulation of <sup>2</sup>hydrogen peroxide in the water of the primary loop of the VVR-M reactor <sup>19 27</sup>

SOURCE: Atomnaya energiya, v. 20, no. 4, 1966, 356-357

hydrogen peroxide, nuclear reactor power,  
TOPIC TAGS: nuclear research reactor, water cooled nuclear reactor,  
nuclear reactor material, corrosion /VVR-M nuclear research reactor

ABSTRACT: The authors present in a brief form the results of their investigations of the formation of hydrogen peroxide causing the corrosion in the VVR-M reactor. The amount of hydrogen peroxide accumulated in the water of the primary loop was measured by polarographic method for power capacities of 7,5, 8, 9, 10, and 12 Mw. The results of measurements for various reactor operation time (up to 100 hrs) are plotted in a graph showing a sharp increase in accumulation. Card 1/2

UDC: 541.15.661.491.621.039.5

L 28844-66

ACC NR: AP6013738

tion during the first 20 or 25 hours and no increase after 30 hours. Another graph shows a linear relationship between the hydrogen peroxide accumulation and the increase in reactor power. The variation in deaeration conditions produces little effect on the removal of hydrogen from the water of the primary loop. It is also graphically shown that the hydrogen peroxide is rapidly dissolved in three to four hours after the reactor shut-down, reaching its minimum concentration in 10 to 15 hours. Then an increase in the minimum concentration is observed due to the action of long-lived isotopes. Orig. art. has: 4 graphs.

SUB CODE: 18 / SUBM DATE: 19June65 / ORIG REF: 004 / OTH REF: 002

Card 2/2 CC

SAYKOVA, G. [Saikova, H.]

Sugar diabetes. Rab.i sial. 39 no.1:22 Ja '63.

(MIRA 16:2)

(DIABETES)

*SAYKOVA, V.V.*

YEVYUKHOVA, M.L.: SAYKOVA, V.V.

Changes in the biochemical composition of the blood and urine in  
wound sepsis. Medych.zhur. 17:226-244 '47. (MIRA 11:1)

1. Z Ukrain'skogo institutu klinichnoi meditsini (direktor - akad.  
M.D.Strazhesko) i klinichnogo viddilu Institutu klinichnoi fiziologii  
AN URSS (direktor - akad. O.O.Bogomolets').  
(WOUNDS) (BLOOD--EXAMINATION)  
(URINE--ANALYSIS AND PATHOLOGY)



SAYKOVA, V.V.

SAYKOVA, V.V., doktor; YEVTUKHOVA, M.L., doktor

Changes in the biochemical composition of the blood and urine in  
wound sepsis. Medych.zhur. 17:245-263 '47. (MIRA 11:1)

1. Z Ukrains'kogo institutu klinichnoi meditsini (direktor - akad.  
M.D.Strazhesko)

(WOUNDS) (BLOOD--EXAMINATION)

(URINE--ANALYSIS AND PATHOLOGY)

SAYKOVA, Varvara Vasil'yeva, kandidat meditsinskikh nauk; PANCHENKO,  
H.A., redaktor; GITSHTEYN, A.D., tekhnicheskiiy redaktor

[Prophylaxis and treatment of cardiovascular inadequacy in  
pregnant women with affected mitral valve] Profilaktika i  
lechenie serdechno-sosudistoi nedostatochnosti u beremennykh  
s nalichiem mitral'noi bolezni. Kiev, Gos. med. izd-vo USSR,  
1955. 142 p. (MLRA 9:2)  
(CARDIOVASCULAR SYSTEM--DISEASES) (PREGNANCY, COMPLICATIONS OF)

STRAZHESKO, Nikolay Dmitriyevich; AYZENBERG, A.A., professor, redaktor;  
YEVYUKHOVA, M.L., dotsent, redaktor; KAVETSKIY, P.Ye., professor,  
redaktor; LIOZINA, Ye.M., dotsent, redaktor; MIKHNEV, A.L.,  
professor, otvetstvennyy redaktor; PRIMAK, F.Ya., professor,  
redaktor; SAYKOVA, V.V., dotsent, redaktor; CHEBOTAREV, D.F.,  
professor, redaktor; YANOVSKIY, D.N., professor, redaktor;  
SNEZHIN, M.I., redaktor izdatel'stva; RAKHLINA, N.P., tekhnicheskij  
redaktor.

[Selected works] Izbrannye trudy. Kiev, Izd-vo Akademii nauk  
USSR. Vol.1. [Problems in the pathophysiology of the circulation  
of the blood] Problemy patofiziologii krovoobrashcheniya. 1955. 398 p.  
Vol.2. [Problems of sepsis, endocarditis, rheumatism, physiology  
and pathology of the organs of digestion] Problema sepsisa, endokardita,  
revmatizma, fiziologiya i patologiya organov pishchevarenia. 1956.  
365 p. (MIRA 9:7)

1. Deystvitel'nyy chlen AN USSR (for Kavetskiy)  
(PHYSIOLOGY, PATHOLOGICAL)

SAYKOVA, YE. A.

"Attempt at a Monographic Study of Industrial Traumatism in the Machine Building Plant."  
State Order of Lenin Inst for the Advanced Training of Physicians imeni S. M. Kirov,  
Leningrad, 1952  
(Dissertation for the Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis', No. 32, 6 Aug 55

SAYKOVICH, G.N., inzh.

New type of gasholder in operation. Prom. stroi. 41 no.4:55  
Ap '64. (MIRA 17:9)

MAR, G.I.; RYTIK, P.G.; SAYKOVSKAYA, V.A.

Effectiveness of antidiphtheria immunization in the White Russian  
Soviet Socialist Republic as measured by the Schick test. Zdrav. Belor.  
5 no.4:13 Ap '59. (MIRA 12:7)

1. Belorusskiy institut epidemiologii, mikrobiologii i gigiyeny  
(direktor V. I. Votyakov).  
(WHITE RUSSIA--DIPHTHERIA)

RUBINSHTEYN, B.B.; BELOUSOVA, V.K.; ZHUKOVA, Z.N.; KOLODOVSKIY, V.L.;  
PROKHOROVA, O.M.; SAYKOVSKAYA, V.A.

Smallpox vaccination in the White Russian S.S.R. Zdrav. Bel.  
7 no. 2:38-40 F '61. (MIRA 14:2)

1. Iz Belorusskogo instituta epidemiologii, mikrobiologii i  
gigiyeny (direktor V.I. Votyakov).  
(WHITE RUSSIA--SMALLPOX--PREVENTION)

KORZENKO, V.N.; SAYKOVSKAYA, V.A.; PROTASENYA, S.G.; KOLIYEV, M.F.  
(Severo-Osetinskaya ASSR); FEDYUSHKIN, M.Ye.; FEYTENGEYMER,  
V.A., kand. veter. nauk; YAMASHEV, S.G., kand. veter. nauk;  
AKHMETZIANOV, F.Kh., mladshiy nauchnyy sotrudnik; SHVETSOV,  
K.A., veterinarnyy vrach; GANIYEV, M.K., prof.; FARZALIYEV,  
I.A., dotsent

Smallpox in cattle. Veterinariia 41 no.7:31-34 J1 '64.  
(MIRA 18:11)

1. Belorusskiy institut epidemiologii i gigiyeny (for Korzenko, Saykovskaya, Protasenia).
2. Direktor Severo-Osetinskoy respublikanskoy veterinarnoy laboratorii (for Fedyushkin).
3. Kazanskiy veterinarnyy institut (for Feytengeyer, Yamashev, Akhmetzyanov, Shvetsov).
4. Azerbaydzhanskiy nauchno-issledovatel'skiy veterinarnyy institut (for Ganiyev, Farzaliyev).



SAYKOVSKAYA, Yu.R. [Sa kova's'ka, IU.R.]

Preparation and packing of drugs in drugstores. Farmatsev. zhur. 19  
no.4:62-64 '64. (MIRA 17:11)

1. Upravlyayushchiy aptekoy No.16 g. L'vova.

SAYKOVSKAYA, Yu.R. [Saikovs'ka, IU.R.] (L'vov); GNIDETS', I.R.  
[Hnidets', I.R.] (L'vov)

Study of some compositions of ingredients in medicinal  
mixtures. Farmatsev.zhur. 20 no.6:81-82 '65. (MIRA 19:1)

YEREMENKO, A.S., kandidat tekhnicheskikh nauk; SAYKOVSKIY, M.I., kandidat  
tekhnicheskikh nauk; VEL'S, S.V., inzhener

Aerodynamic study of the exhaust pipe of a steam turbine. Trudy Inst.  
tepl. AN URSR no.8:78-100 '52. (MIRA 8:7)  
(Steam turbines)

*SHYKOVSKIY, M.I.*  
KULIKOVSKIY, Pavel Pavlovich, kand.tekhn.nauk; SHVETSOV, Petr Dmitriyevich, prof.; SEMENOV, Aleksandr Sergeyevich, dots.; MOZER, V.F., prof., retsenzent; SAYKOVSKIY, M.I., kand.tekhn.nauk, retsenzent; KIRAKOVSKIY, N.F., dots., red.; TSITKIN, S.I., kand.tekhn.nauk, red.; ROMANOVSKIY, I.A., inzh., red.; SERDYUK, V.K., inzh., red. izd-va; RUDENSKIY, Ya.V., tekhn.red.

[Steam engines; control, adjustment, and testing; a manual] Parovye dvigateli; kontrol', naladka, isputanie. Spravochnoe rukovodstvo. Kiev, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1955. 377 p. (MIRA 11:6)

(Steam engines--Handbooks, manuals, etc)

124-1957-2-1745

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 43 (USSR)

AUTHORS: Yeremenko, A.S., Saykovskiy, M.I.

TITLE: Model Tests of the Aerodynamics of the Inlet Duct of a Compressor  
(Modelirovaniye aerodinamiki vsasyvayushchego patrubka kompres-  
sora)

PERIODICAL: Sb. tr. In-ta teploenerg. AN UkSSR, 1955, Nr 12, pp 140-149

ABSTRACT: The results of experiments are shown, investigating the effect  
on the structure of a flow of an extension installed at the entry and  
of a blade cascade placed at the exit of an inlet duct.

I.S.Simonov

1. Compressors--Aerodynamic characteristics

Card 1/1

SAYKOVSKIY, M.I.

YEREMENKO, A.S.; SAYKOVSKIY, M.I.

~~XXXXXXXXXXXXXXXXXXXX~~  
Aerodynamic investigation of a turbine diffuser nozzle allowing  
for blade cascade resistance at the entry and outlet. Trudy Inst.  
tepl.AN URSR no.13:41-52 '56. (MLRA 10:5)  
(Turbines)

SOV/124-58-4-3972

Translation from: Referativny zhurnal, Mekhanika, 1958, Nr 4, p 43 (USSR)

AUTHORS: Yeremenko, A. S., Saykovskiy, M. I.

TITLE: On the Evaluation of the Aerodynamic Properties Of Connecting Nozzles for Turbine-type Machinery (K voprosu otsenki aerodinamicheskogo kachestva patrubkov turbomashin)

PERIODICAL: Sb. tr. In-t teploenerg. AN Ukr SSR, 1956, Nr 13, pp 99-103

ABSTRACT: For the evaluation of the aerodynamic properties of various types of connecting nozzles for the turbine-type machinery, the authors suggest that in lieu of the hydraulic loss coefficients, the coefficient of resistance  $\zeta_r$  or loss coefficient  $\zeta_l$  be employed. These coefficients refer to the dynamic head at the inlet, which is calculated on the basis of the resultant velocities, viz.:

$$\zeta_r = 1 + \frac{2\lambda_2 - \chi_2}{n^2 \chi_1} - \frac{2\lambda_1}{n \chi_1}, \quad \zeta_l = 1 + \frac{2\lambda_2}{n^2 \chi_1} - \frac{2\lambda_1}{n \chi_1}$$

Card 1/2 where  $\lambda_{1,2}$  and  $\chi_{1,2}$  are coefficients characterizing the

SOV/124-58-4-3972

On the Evaluation of the Aerodynamic Properties (cont.)

nonuniformity of the momentum and the kinetic energy at the nozzle inlet and outlet, and  $n$  is a quantity characterizing the divergence of the nozzle towards the exit.

V. I. Vasilyev

1. Nozzles--Aerodynamic characteristics
2. Turbines--Equipment

Card 2/2



YAKOVKIN, Avenir Aleksandrovich. Prinimali uchastiye: GORDELADZE, Sh.G.,  
nauchnyy sotrudnik; KOLCHINSKIY, I.G., nauchnyy sotrudnik;  
SAYKOVSKIY, M.I., nauchnyy sotrudnik; KOLCHINSKIY, I.G., kand.  
fiziko-matemat.nauk, otv.red.; LABINOVA, N.M., red.izd-va;  
SKLYAROVA, V.Ye., tekhn.red.

[Artificial earth satellites] Iskusstvennyye sputniki zemli.  
Kiev, Izd-vo Akad.nauk USSR, 1958. 46 p. (MIRA 12:9)

1. Glavnaya astronomicheskaya observatoriya AN USSR (for Gorde-  
ladze, Kolchinskiy). 2. Institut teploenergetiki AN USSR (for  
Saykovskiy).

(Artificial satellites)

PHASE I BOOK EXPIRATION SOV/3998  
SOV/31-N-14

Академия наук УССР. Институт теплоэнергетики

Теплообмен в гидротурбинах (Heat Transfer and Hydrodynamics) Kiev, 1958. 190 p. (Series: Изд. Стомик Трудов, no. 14) 2,000 copies printed.

Eds. of Publishing House: Ye. I. Kaplan and N. M. Labinova; Tech. Ed.: N. I. Verbitsky; Editorial Board: I. T. Shvets (Resp. Ed.), Academician, Academy of Sciences USSR; G. M. Shchegolev (Deputy Resp. Ed.), Candidate of Technical Sciences; N. M. Kondak (Resp. Secretary), Candidate of Technical Sciences; V. I. Tolubinskiy, Corresponding Member, Academy of Sciences USSR; I. I. Chernobyl'skiy, Doctor of Technical Sciences; M. M. Nazarchuk, Candidate of Technical Sciences; P. I. Lavrov, Candidate of Technical Sciences; P. P. Shvetsov, Professor; and N. M. Pyatyshchin, Candidate of Technical Sciences.

PURPOSE: This collection of articles is intended for scientific workers and technical personnel in the fields of heat transfer and hydrodynamics.

CONTENTS: This collection of 18 articles deals with experimental and theoretical studies of problems in heat transfer and hydrodynamics as they affect steam and gas turbines and heat-transfer devices. The results of theoretical investigations of heat transfer in turbine components and in elements of heat-utilizing apparatus are described, and new calculation methods are suggested. Several problems of the thermodynamics and aerodynamics of steam and gas turbines are discussed. References follow each article.

Rulitskiy, S. A. Investigation of the Amount of Heat Given off When Liquid Solutions of Lithium Bromide and Lithium Chloride are Billed Under Vacuum. This paper deals with a study of the heat-transfer coefficient for liquid solutions of LiBr and LiCl under conditions of boiling under vacuum. The effects of the concentration of the solution, the ambient pressure, and other parameters are determined.

Bromut, I. Ye. Approximate Method of Calculating Velocity and Temperature Fields for the Case of Laminar Flow of a Compressible Fluid With Heat-Transfer Around an Object. On the Possibility of Reducing the Differential Equations of a Laminar Boundary Layer to Ordinary Differential Equations.

Shvetsov, P. D., and V. I. Tschuk. Aerodynamic Investigations of the System of Interchange of Steam in Powerful Steam Turbines. The authors present the results of model tests to study inter-turbine exchange in steam turbines. The study is primarily concerned with the hydraulic losses encountered. Recommendations are given for reducing the internal drag of the system are presented.

Gaidman, I. L. Effect of Manufacturing Defects on End Losses in the Guide Vanes of Welded Turbine Diaphragms.

Gorbunov, Yu. P., A. Sh. Dorfman, and M. I. Savkovskiy. Effect of Reactivity and Pitch on the Magnitude of the Hydraulic Losses in Cascades.

Savkovskiy, M. I., and A. Sh. Dorfman. Criteria for Estimating the Efficiency of Intake Nozzles.

Yermenko, A. S., and A. P. Fedosenko. Losses in Turbine Guide Vanes of the Cascade Type.

Yermenko, A. S., and A. P. Fedosenko. Investigation of the Losses in Turbine Blade Cascades.

The above two papers deal with an investigation of the losses in turbine guide vanes of the cascade type. The efficiency of the cascade is determined as a function of the inflow angle, blade-pitch angle, blade pitch, and other parameters.

Shveta, I. T., V. M. Slonov, and I. I. Romanovskiy. Experimental Investigation of the Heat Conductivity of Soils Used in Greenhouses and Boilers.

AVAILABLE: Library of Congress

Card 7/7

AS/PA/PA  
7-28-60

Saykovskiy, M.L.

26.5000

82131  
S/124/60/000/002/006/012

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 2, p. 49, # 1929

AUTHORS: Saykovskiy, M.I., Dorfman, A.Sh.

TITLE: On Criteria for Evaluating the Quality of Branch Pipes

PERIODICAL: Sb. tr. In-t teploenerg. AN UkrSSR, 1958, No. 14, pp 159 - 166

TEXT: The influence of losses in branch pipes on the turbine power is considered, and the evaluation criterion of the branch pipe quality is derived:

$$\beta_{\text{inlet}} = \left[ 1 + \frac{x}{x+1} \lambda_3^2 \xi_{\text{inlet}} \left( 1 - \frac{x-1}{x+1} \lambda_3^2 \right)^{\frac{1}{x-1}} \right]^{-1}$$

for the inlet branch pipe, and

$$\beta_{\text{outlet}} = \left[ 1 - \frac{x}{x-1} \lambda_3^2 \xi_{\text{outlet}} \left( 1 - \frac{x-1}{x+1} \lambda_3^2 \right)^{\frac{1}{x-1}} \right] \left( 1 - \frac{x-1}{x+1} \lambda_1^2 \right)^{\frac{x}{x-1}}$$

for the outlet branch pipe. Here are:  $\lambda = c/a_*$  is the reduced velocity,  $\xi = \Delta p_0 / 0.5 \rho c^2$  is the resistance coefficient of the branch pipe,  $x$  is the adiabatic exponent,  $c$  is the velocity in the narrow section of the branch pipe,  $a_*$  is the critical velocity,  $\Delta p_0$  are the losses of total pressure in the branch pipe,  $\lambda_2, \lambda_3, \lambda_4$  are the reduced velocities at the turbine inlet, the turbine

Card 1/2

82131

S/124/60/000/002/006/012

On Criteria for Evaluating the Quality of Branch Pipes

outlet, and at the outlet section of the outlet branch pipe respectively. The value  $\beta$  characterizes the drop lowering within the turbine by the branch pipes. It is represented by the ratio of the pressure drop lost in the turbine to the drop in a hypothetical case, when the losses in the branch pipes and also the losses due to the outlet velocity  $\lambda_4$  do not exist. The authors come to the conclusions: 1) The quality of the branch pipe should be determined by the value of  $\beta$ ; 2) the more convenient value  $\xi_* = \Delta p_0 / (0.5 \rho a_*^2) + \lambda_4^2$  may be used instead of  $\beta$  when the velocities are small and the losses are low; 3) the usually used loss coefficient may be employed as evaluation criterion only for a comparison of branch pipes having equal reduced velocities in their narrow sections. There are 5 references.

A. M. Pavlenko

X

Card 2/2

10(3, 6)

SOV/170-59-4-2/20

AUTHORS: Dorfman, A.Sh., Pol'skiy, N.I., Saykovskiy, M.I.

TITLE: On One Characteristic of Local Expansion of Diffusor Channels  
(Ob odnoy kharakteristike lokal'nogo rasshireniya diffuzor-nykh kanalov)

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1959, Nr 4, pp 8-14 (USSR)

ABSTRACT: The problem of determining the losses in diffusor channels of arbitrary configuration is at present very difficult as the nature of their origin is complicated. The authors attempt to establish one very general characteristic suitable for investigating diffusors of any shape and demonstrate its applicability to the study of radial-ring diffusors of gas turbine exhaust pipes. They introduce a concept of the local expansion angle of an arbitrary diffusor defined as follows:

$$\theta = 2 \arctg \left\{ \frac{1}{u} \frac{dF}{ds} \right\}$$

where  $u$  is the circumference of a section being equal to  $\pi D$ ;  $F$  is the area of the local cross section, and  $s$  is the lengthwise coordinate. This concept makes it possible to apply the results obtained in investigations of conic-shaped diffusors

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SOV/170-59-4-2/20

On One Characteristic of Local Expansion of Diffusor Channels

to those of more complicated configurations. The authors consider the case of a radial-ring diffusor and solve the direct problem of finding the formula for determining its expansion angles and the inverse problem of designing the radial-ring diffusor according to a given function of expansion angle distribution along the diffusor. On the basis of their analysis they designed radial-ring diffusors for small-size exhaust pipes of gas turbines. They recommend that the values of expansion angle should be approximately  $8$  to  $10^\circ$  in the beginning of the diffusor. The conclusions drawn by the authors were confirmed by a series of experiments performed in the Gas Dynamics Laboratory of the Institute of Thermal Power Engineering of the AS UkrSSR.

There are: 1 schematic diagram, 1 graph, 1 table and 2 Soviet references.

Card 2/3

SOV/170-59-4-2/20

On One Characteristic of Local Expansion of Diffuser Channels

ASSOCIATION: Institut teploenergetiki AN USSR (Institute of Thermal Power Engineering of the AS UkrSSR), Kiev

Card 3/3

SAYKOVSKIY, M.I., kand.tekhn.nauk; DORFMAN, A.Sh., kand.tekhn.nauk; GORBATYY,  
Yu.P., kand.tekhn.nauk

Selecting pitches for turbine bladings. Energomashinostroenie 5 no.3:  
35-37 Mr '59. (MIRA 12:3)  
(Turbines)



SAYKOVSKIY, M.I.

82130  
S/124/60/000/002/005/012

26.5000

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 2, p. 49, # 1928

AUTHORS: Gorbatyy, Yu.P., Dorfman, A.Sh., Pol'skiy, N.Y., Saykovskiy, M.I.

TITLE: Aerodynamic Investigation of Exhaust Branch Pipe Models of a Gas Turbine <sup>20</sup>

PERIODICAL: Sb. prats'. In-t teploenerg. AN UkrSSR, 1959, No. 16, pp. 25 - 34  
(Ukr., Russ. summary) <sup>23</sup>

TEXT: Results of an aerodynamic investigation of models of a gas turbine exhaust branch pipe are presented. The branch pipe consists of a radical ring diffuser, being the main part of the branch pipe, the snail, and the diffuser outlet duct. Some variants of the branch pipe were examined with diffusers having different widening ratios. It turned out that the optimum widening ratio of the diffuser is close to three. The loss factor of this branch pipe proved to be  $\xi_{\text{loss}} = 0.53$  (taking into account the losses with outlet velocity). The mounting of annular guide surfaces within the diffuser, aiming at a decrease in the diffuser opening angle, leads to a noticeably lowered loss. The application of such surfaces led in the present case to a decrease of the  $\xi_{\text{loss}}$  value down to 0.45 and to a pressure recovery factor  $\varphi = 0.59$  (at the Mach number 0.4 at the branch pipe entrance).

Card 1/1

V.Kh. Abiantz <sup>23</sup>

DORFMAN, A.Sh.; SAYKOVSKIY, M.I. [Saikovs'kyi, M.I.]

Determining the parameters of a gas leaving a gas turbine. Zbir.  
prats' Inst.tepl. AN URSR no.16:61-66 '59. (MIRA 13:10)  
(Gas turbines)

SAYKOVSKIY, M. I.

PHASE I BOOK EXPLOITATION

SOV/4219

Dorfman, Abram Shlemovich, Mikhail Mikhaylovich Nazarchuk, Naftul Iosifovich Pol'skiy and Mikhail Il'ich Saykovskiy

Aerodinamika diffuzorov i vykhlopnykh patrubkov turbomashin (Aerodynamics of Diffusers and Exhaust Outlets of Turbines) Kiyev, Izd-vo AN UkrSSR, 1960.  
188 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut teploenergetiki.

Ed. of Publishing House: I. V. Kisina; Tech. Ed.: N. P. Rakhlina.

PURPOSE: This book is intended for scientists and engineers working in the field of applied gas dynamics. It will also be of interest to turbine designers.

COVERAGE: The book presents methods for calculating gas flows in straight-sided and curved-contour diffusers and develops methods for designing turbine exhaust nozzles. Methods of experimental investigation of nozzles are considered as well as the effect of nozzle losses on the efficiency of the turbines. The book outlines the basic results of a study of the flows of viscous incompressible fluids

Card 1/6

Aerodynamics of Diffusers and Exhaust (Cont.)

SOV/4219

in straight-sided and conical diffusers, studies in detail viscous gas flow in conical diffusers, and puts forth a method for calculating flow losses and flow parameters. The concept of the local expansion angle of a diffuser which permits using the results of the investigation of conical diffusers for the evaluation of the losses in several types of curved-contour diffusers is introduced. Particular attention is given to the study of annular diffusers. The authors state that a considerable part of the data given in this book appears for the first time. No personalities are mentioned. There are 39 references: 37 Soviet, 2 German.

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| Ch. I. Some Concepts of Gas Dynamics                 | 7  |
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Card 2/6

DORFMAN, A.Sh., kand.tekhn.nauk; SAYKOVSKIY, M.I., kand.tekhn.nauk  
~~SECRETED: 03/14/2001~~

Thermally insulated flow of viscous gas in a diffuser. Teplo-  
energetika 7 no.6:77-82 Je '60. (MIRA 13:8)

1. Institut teploenergetiki AN SSSR.  
(Fluid dynamics)

DORFMAN, A.Sh. (Kiyev); POL'SKIY, N.I. (Kiyev); SAYKOVSKIY, M.I. (Kiyev)

Concerning the drawing-off of the boundary layer in annular  
diffusers. Izv. AN SSSR. Otd. tekhn. nauk. Energ. i avtom.  
no.6:156-162 N-D '61. (MIRA 14:12)

(Diffusers)

DORFMAN, A.Sh.; SAYKOVSKIY, M.I.

Determining the optimum shape of a diffuser in detached flow  
with an arbitrary mean line. Inzh.-fiz. zhur. no.12:88-94 D'63.  
(MIRA 17:2)

1. Institut teploenergetiki AN UkrSSR, Kiyev.

L-41078-65 EPA/EWT(1)/EWP(m)/EWP(f)/EPF(n)-2/EPR/T-2/EPA(bb)-2/FCS(k)/EWA(1)

Pd-1/Paa-4/ps-4/Pi-4 WW

ACCESSION NR: AP5005835

S/0114/65/000/002/0017/0020

AUTHOR: Dorfman, A. Sh. (Candidate of technical sciences); Saykovskiy, M. I. (Candidate of technical sciences); Didenko, O. I. (Engineer); Stepanenko, A. P. (Engineer)

TITLE: Results of aerodynamic testing of pipe models of GT-6-750 gas-turbine plant

SOURCE: Energomashinostroyeniye, no. 2, 1965, 17-20

TOPIC TAGS: gas turbine, exhaust duct, inlet duct / GT-6-750 gas turbine

ABSTRACT: Results of the designing and aerodynamic testing of models of the turbine exhaust duct and compressor inlet duct are reported. Five variants of the exhaust duct (dimensions tabulated) were tested by integral methods within 0.1-0.35 Mach number at the diffuser inlet. Plots of the relative restorations of static pressure vs. the Mach number are presented. Two variants -- with bottom

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L 41678-65

ACCESSION NR: AP5005835

and diagonal entrances -- of the inlet ducts were tested; each variant had two modifications (0.73 and 0.71 hub-tip ratios). It is found that: (1) Increasing the axial dimension of the exhaust duct to a certain limit results in its higher efficiency; (2) A suitable diffuser profile can ensure duct efficiency without the use of separators; (3) Losses in all variants are rather low, being lower in diagonal-entrance arrangements than in bottom-entrance ones. Other specific findings re various variants are reported. Orig. art. has: 5 figures, 4 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PR

NO REF SOV: 001

OTHER: 000

Card *llc*  
2/2

L 39292-65 EWT(1)/EWP(m)/EWA(d)/FOS(k)/EWA(1) Pd-1  
ACCESSION NR: AP5010079 UR/0170/65/008/004/0536/0539

AUTHOR: Dorfman, A. Sh.; Nazarchuk, M. M.; Pol'skiy, N. I.; Saykovskiy, M. I. <sup>21</sup>

TITLE: Calculation of diffuser losses

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 8, no. 4, 1965, 536-539

TOPIC TAGS: diffuser, conical diffuser, curvilinear diffuser, diffuser calculation, diffuser loss

ABSTRACT: Methods of diffuser calculation are briefly reviewed and difficulties in the calculation of wide-angle diffusers with flow separation are stressed. Formulas for the calculation of friction and expansion losses in conical diffusers without flow separation based on the analogy with the flow in pipes are given. The approach to this problem by various authors is described and analyzed. The authors of this article view favorably the attempts to apply the general notions of aerodynamics to the determination of losses in curvilinear diffusers. They also express the opinion that along with the establishment of a general method of calculating viscous fluid flow, engineering calculating methods based on generalized experimental results should be introduced. Orig. art. has: 4 figures.

[AC]

Card 1/2

L 39292-65

ACCESSION NR: AP010079

ASSOCIATION: Institut tekhnicheskoy fiziki AN UkrSSR, Kiev (Institute of Technical Physics, AN UkrSSR)

SUBMITTED: 26May64

ENCL: 00

SUB CODE: PR, ME

NO REF SOV: 010

OTHER: 001

ATD PRESS: 3226

Card 2/2

L 26505-66 EWP(m)/EWT(1) GS

ACC NR: AT6008147

UR/0000/65/000/000/0072/0080 36

AUTHOR: --Saykovskiy, M.I.; Dorfman, A.Sh. (Candidate of technical sciences); Didenko, O.I.; Kussyuk, A.I.; Stepanenko, A.P.

ORG: None

TITLE: Results of aerodynamic investigation of the compressor intake on models and in full scale

SOURCE: AN UkrSSR. *Techeniya zhidkostey i gazov* (Flows of liquids and gases) Kiev, Naukova dumka, 1965, 72-80

TOPIC TAGS: compressor design, aerodynamic test, test model

ABSTRACT: The paper describes scale model and full scale aerodynamic tests on compressor intakes. Rigidly oriented 3-channel total pressure tubes installed in a rotatable ring were used to measure the flow turning angle, velocity, and total air pressure. Schematics of the compressor intake are shown. The energy loss coefficient,  $\xi$ , of the intake was calculated from the average loss of total pressure,  $\Delta_0$ , the average ram density,  $\rho$ , the average normal velocity,  $v_n$ , and the compressibility correction factor  $\delta$  ( $\delta = 1 - M^2/4$ ) using:  $\xi = 2\Delta_0/\rho_0 v_n$ . (1) Conditions and measurement results are given for 12 design variants. All variants show a fairly uniform distribution of velocities over the cross sections. Losses are comparatively low in all variants, somewhat

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L 26505-66

ACC NR: AT6008147

lower for the design with a diagonally disposed entrance. Hints for efficient compressor intake design are discussed, among them the necessity to have adequate overall axial dimensions so as not to increase unduly the curvature at flow bends. Model tests have indicated a sufficiently close correspondence of the flow rotation angles and velocity distributions with the full scale data. Orig. art. has: 4 figures, 1 formula.

SUB CODE: 13/

SUBM DATE: 01Sep64

Card 2/2

NC

L 46245-66 EWT(m)/T DS/GD  
ACC NR: AT6024966 (N)

SOURCE CODE: UR/0000/65/000/000/0025/0032

AUTHOR: Drobantsova, N. T.; Saymanova, A. I.

26  
B+1

ORG: Kharkov Polytechnic Instituto imeni V. I. Lenin (Khar'kovskiy politekhnicheskii institut)

TITLE: Comparative study of chromium deposits from tetrachromate and standard electrolytes

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Zashchitnyye metallicheskiye i oksidnyye pokrytiya, korroziya metallov i issledovaniya v oblasti elektrokhimii (Protective metallic and oxide coatings, corrosion of metals, and studies in electrochemistry). Moscow, Nauka, 1965, 25-32

TOPIC TAGS: chromium plating, chromate, electrodeposition

ABSTRACT: Certain structural characteristics of chromium deposits from cold tetrachromate baths of ordinary and self-regulating types were studied in comparison to deposits from a standard bath. The bath compositions and the electrodeposition conditions were as follows: (1) Ordinary tetrachromate bath; composition (g/l):  $\text{CrO}_3$  380,  $\text{NaOH}$  60,  $\text{H}_2\text{SO}_4$  0.9-1,  $\text{Cr}_2\text{O}_3$  8-12,  $\text{MgSO}_4$  2.5; temperature 18-25°,  $D_c = 10-50 \text{ A/dm}^2$ . (2) Self-regulating tetrachromate bath; composition:  $\text{CrO}_3$  270,  $\text{CaCO}_3$  50-60,  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$  5-20; temperature 18-25°,  $D_c = 10-50 \text{ A/dm}^2$ . (3) Standard bath; composition:  $\text{CrO}_3$  250,  $\text{H}_2\text{SO}_4$  2.5; temperature 55°,  $D_c = 10-50 \text{ A/dm}^2$ . Laboratory experiments and

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L 46845-66

ACC NR: AT6024966

industrial practice showed that the self-regulating tetrachromate electrolyte has a number of advantages over the standard electrolyte: the current efficiency is 2.5-3 times higher, the electrolyte is stable during the electrodeposition process, and its use makes the correction for sulfuric acid unnecessary. The chromium deposits from the self-regulating electrolyte are very compact, which makes it possible to obtain nonporous, corrosion-resistant coatings without copper and nickel underlayers. All these factors simplify and reduce the cost of the technological process of chromium plating. It is recommended that the use of the self-regulating tetrachromate electrolyte be expanded. Orig. art. has: 7 figures.

SUB CODE: 13/ SUBM DATE: 25Nov63/ ORIG REF: 015/ OTH REF: 007

Cord 2/2

blg

SAYMANOVA, R.A.

Isolating and studying the bacteriophage of pseudolactic  
acid bacteria which cause the souring of beer. Uch.sap.Kaz.  
un. 116 no.1:207-211 '55. (MLRA 10:5)

1.Kafedra fiziologii rasteniy i mikrobiologii.  
(Bacteriophage) (Lactic acid bacteria)  
(Beer)



USSR / Microbiology. Industrial Microbiology.

F-3

Abs Jour : Ref Zhur - Biol., No 20, 1958, No. 90821

Author : Saymanova, R. A.

Inst : Kazan University

Title : Sulfate-Reducing Bacteria as Nuisances in Hydroxyl  
Production

Orig Pub : Uch. zap. Kazansk. un-ta, 1957, 117, No 2, 231-234

Abstract : No abstract given

Card 1/1

KAVEYEV, M.S.; SAYMANOVA, R.A.

Microbiological characteristics of underground waters in the  
southeastern Tatar A.S.S.R. Izv. Kazan. fil. AN SSSR. Ser.  
geol. nauk no. 7:389-396 '59. (MIRA 14:4)  
(Tatar A.S.S.R.--Water, Underground--Analysis)

SAYMANOVA, R.A.; YUSUPOVA, D.V.

Study of bacteria with deoxyribonuclease activity. Mikrobiologiya  
32 no.1:27-32 '63 (MIRA 17:3)

1. Kazanskiy gosudarstvennyy universitet.

TARANOV, O.N.; SAYMASAYEV, S.S.; KOLOKOL'NIKOVA, I.Ye.

Effect of presowing irradiation of seeds by gamma-rays of  $Co^{60}$   
on the growth, development and productivity of spring wheat.  
Trudy Inst.bot.AN Kazakh.SSR 20:128-138 '64.

(MIRA 18:1)

SAYMON, K. R.

AUTHOR SAYMON, K.R., KERST, D.V., DZHONS, L.V. LASLET, L.Dzh., 53-4-5/7  
 Terviliger, K.M.  
 TITLE Strongly Focusing Accelerator With Constant Magnetic Field.  
 (Sil'no fokusiruyushchiye uskoriteli s postoyannym magnitnym polem  
 -Russian)  
 PERIODICAL Uspekhi Fiz.Nauk, 1957, Vol 61, Nr 4, pp 613-652 (U.S.S.R.)  
 Received 6/1957 Reviewed 7/1957

ABSTRACT The paper under review apparently is the translation of a paper  
 published in Phys.Rev., Vol 103, pp 1837 (1956). The correct spel-  
 ling of the names of the authors is not given, and the original  
 should be consulted for this purpose. According to a note by the  
 Soviet translator, such an accelerator was proposed in 1953 by A.  
 A. Kolomenskiy, V.A.Petukhov, M.S.Rabinovich, see "Nekotoryye vo-  
 prosy teorii tsiklicheskih uskoriteley" ("Some Problems of the  
 Theory of the Cyclic Accelerators"), published by the Academy of  
 Science of the U.S.S.R., 1955.  
 (25 reproductions, 3 charts).

ASSOCIATION  
 PRESENTED BY  
 SUBMITTED  
 AVAILABLE  
 Card 1/1

Library of Congress

SHAVKUNOV, A.V., inzh.; AKSENOV, N.A., inzh.; MUGORMAN, Yu. N., inzh.;  
KOLCHINSKIY, V.I., inzh.; Primalni uchastiye: KORNEYEVA, M.P., inzh;  
CHERNOV, V.I., inzh.; MARKAROV, S.Ye., inzh.; SAYMUKOVA, Ye.P., inzh;  
LUKASH, B.K., starshiy master; TITOV, S.A., svarshchik; BEREZOVSKIY, V.A.

Welding titanium alloys in chambers with a controlled atmosphere.

Svar. proizv. no.4:24-25 Ap'61.

(MIRA 14:3)

(Titanium alloys- Welding)

(Protective atmospheres)

SAYNER, I., doktor meditsiny

Dosage of drugs in pediatrics. Pediatriia 36 no.2:71-73 P '59.  
(MIRA 12:4)

1. Iz Farmakologicheskogo instituta meditsinskogo fakul'teta g.  
Brno Chekhoslovatskoy Narodnoy Respubliki.

(PEDIATRICS

drug dos. in pediatrics (Rus))

(DRUGS

dos. in pediatrics (Rus)

SAYRANOV, Khaydar Sayranovich; BYLINSKAYA, I.G., red.; MATVEYEV, A.P.,  
tekhn.red.

[The most important sector] Glavnoe napravlenie. Moskva,  
Izd-vo "Sovetskaya Rossiya," 1960. 45 p.

(MIRA 14:2)

1. Sekretar' Bashkirskogo obkoma Kommunisticheskoy partii  
Sovetskogo Soyuza (for Sayranov).

(Bashkiria--Industries) (Bashkiria--Agriculture)



NIKITIN, Petr Arkad'yevich; KOROVIN, M.A., red.; SAYTANIDI, L.D., tekhn.  
red.

[Argudan millions] Argudanskie milliony. Moskva, Izd-vo M-va sel'.  
khov. RSFSR, 1960. 84 p. (MIRA 14:7)  
(Argudan--Corn (Maize))

MAMIN, A.Ye.; RUDNITSKIY, V.T.; SAZONOV, V.V., red.; SAYTANIDI, L.D.,  
tekhn.red.

[Practices of Vladimir people] Opyt vladimirtsev. Moskva,  
Izd-vo M-va sel'.khoz.RSFSR, 1960. 95 p.

(MIRA 14:2)

(Vladimir District--Stock and stockbreeding)

FROLOV, Boris Alekseyevich, kand. veter. nauk; SAYTANIDI, V.N.,  
red.

[External parasites of poultry and measures for their control]  
Naruzhnye parazity ptits i mery bor'by s nimi. Moskva, Kolos,  
1965. 93 p. (MIRA 18:10)

YARNYKH, V.S.; SAYTANIDI, V.N., red.

[Mechanization of veterinary hygiene work] Mekhanizatsiia  
veterinarno-sanitarnykh rabot. Moskva, Kolos, 1965. 287 p.  
(MIRA 18:12)

SAYTANOV, A.O. (Moskva)

Pathogenesis and clinical aspects of coronary deficiency  
(stenocardia). Fel'd. i akush. 21 no.2:3-7 F '56. (MLRA 9:5)  
(ANGINA PECTORIS)

SAYTANOV, A.O. (Moskva)

Treatment and prophylaxis of coronary insufficiency (sterncardia)  
Fel'd. 1 akush. 21 no.3:8-13 Mr '56. (MLRA 9:7)  
(ANGINA PECTORIS)

*Saytanov, A.O.*  
SAYTANOV, A.O.

Problem of electrocardiographic changes in chronic cyanide poisoning.  
Terap.arkh. 30 no.1:43-50 Ja '58. (MIRA 11:3)

1. Iz klinicheskogo sektora (zav. - prof. A.L.Morozov) Instituta  
gigiyeny truda i profzabolevaniy AMN SSSR.

(CYANIDES, poisoning,

clin. & ECG aspects (Rus))

(ELECTROCARDIOGRAPHY, in var. dis.

cyanide pos. (Rus))





SAYTANOV, A.O.

Electrocardiogram in healthy rabbits in standard and thoracic leads and methods for its registration. Biul. eksp. biol. i med. 49 no. 6:102-109 Je '60. (MIRA 13:8)

1. Iz radiotoksikologicheskoy laboratorii (zav. - prof. E.B. Kurlyanskaya) Instituta gigiyeny truda i profzabolevaniy (dir. - deystv. chlen AMN SSSR A.A. Letavet) AMN SSSR, Moskva. Predstavlena deystv. chlenom AMN SSSR A.A. Letavetom.  
(ELECTROCARDIOGRAPHY)

KONCHALOVSKAYA, N.M., prof.; SAYTANOV, A.O.; MASICH, T.A.

Changes in the heart in disorders of electrolyte balance;  
clinical and electrocardiographic observation. Kardiologiya  
3 no.6:54-59 N-D '63. (MIRA 17:6)

1. Iz Instituta gigiyeny trudy i professional'nykh zabolevaniy  
(direktor - deystvitel'nyy chlen AMN SSSR prof. A.A. Letavet)  
AMN SSSR.

OVAKIMOV, V.G.; BIBIKHIN, L.N.; SAYTANOV, A.O.

Changes in the electrocardiogram of rabbits subjected to the chronic action of radioactive zinc following intravenous administration of adrenalin and ammonia inhalation. Med. rad. 8 no.9: 55-61 S'63. (MIRA 17:4)

1. Iz laboratorii radiotoksikologii (zav. - prof. E.B. Kurlyandskaya) Instituta gig'eny truda i professional'nykh zabolevaniy (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Letavet) AMN SSSR i Instituta meditsinskoy radiologii AMN SSSR.

SAYTBURKHANOV, Sh., aspirant

Herbicides increase the vitamin C content of plants. Nauka i pered.  
op. v sel'khoz 9 no.10:41 0 '59 (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva Kraynego  
Severa.

(Herbicides) (Ascorbic acid)

SAYTBURKHANOV, Sh.R.

Chickweed (*Stellaria media* [L.] Cyr.) in wooded tundras and measures for its control. Bot.zhur. 47 no.2:213-217 F '62. (MIRA 15:3)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva  
Kraynego Severa, g. Noril'sk.  
(Russia, Northern—Chickweed)

BURYKIN, D.A. (Noril'sk, Krasnoyarskogo kraya); KRAN, A.P., agronom  
(Noril'sk, Krasnoyarskogo kraya); SAYTBURKHANOV, Sh.R., nauchnyy  
sotrudnik (Noril'sk, Krasnoyarskogo kraya)

Chemical weed control in the Far East. Zashch. rast. ot vred. i  
bol. 6 no.7:32-33 J1 '61. (MIRA 16:5)

1. Direktor Noril'skogo soveta narodnogo khozyaystva (for Burykin).
2. Institut sel'skogo khozyaystva Kraynego Severa (for Saytburkhanov).  
(Soviet Far East—Weed control)

SAYTBURKHANOV, Sh.R.

Weed control in crop fields by chemical means in the Far North. Probl.  
Sev. no.7:106-113 '63. (MIRA 17:2)

SAYTENKO, V. G.

"Fight Against Losses in the Growing of Flax in the Flax-Growing Kolkhozes of the Latvian SSR." Cand Agr Sci, Latvian Agricultural Acad, Riga, 1953. (RZhBiol, No 5, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55



ACC NR: AP7001181

SOURCE CODE: UR/0166/66/000/005/0073/0075

AUTHORS: Saytova, U.; Dzhaksimov, Ye.

ORG: Tashkent State University im. V. I. Lenin (Tashkentskiy gosuniversitet)

TITLE: On the theory of galvanomagnetic effects in semiconductors, taking into account the "drag" effect in strong magnetic fields

SOURCE: AN UzSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 5, 1966, 73-75

TOPIC TAGS: Ettinghausen effect, Nernst effect, galvanomagnetic effect, Hall effect, electron, phonon, phonon drag, magnetic field, heat conductivity, adiabatic process, semiconductor theory

ABSTRACT: This paper shows the "drag" effect on galvanomagnetic effects in strong magnetic fields and contains calculations of adiabatic corrections under the assumption that electrons collide mainly with phonons, and phonons collide with other phonons. The following formulas are obtained: 1) for the Ettingshausen effect

$$\frac{dT}{dy} = \frac{16}{9\pi} \frac{k_0}{\tau} \frac{c}{\mu_0 H} \frac{T}{z_\phi} \left[ 1 + 0,3 \left( \frac{e\alpha_\phi}{k_0} \right) + \frac{z_e}{z_\phi} \left\{ 2 + 1,3 \left( \frac{e\alpha_\phi}{k_0} \right) + 0,4 \left( \frac{e\alpha_\phi}{k_0} \right)^2 + 0,1 \left( \frac{e\alpha_\phi}{k_0} \right)^3 \right\} + \right. \\ \left. + \frac{45\pi}{64} \left( \frac{z_e}{z_\phi} \right)^2 \left\{ 0,5 + 0,6 \left( \frac{e\alpha_\phi}{k_0} \right) + 0,3 \left( \frac{e\alpha_\phi}{k_0} \right)^2 + 0,1 \left( \frac{e\alpha_\phi}{k_0} \right)^3 + 0,02 \left( \frac{e\alpha_\phi}{k_0} \right)^4 - 0,03 \left( \frac{e\alpha_\phi}{k_0} \right)^5 \right\} \right] l_x \sin \theta;$$

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2) for the Nernst effect

$$\frac{dT}{dx} = -\frac{1}{2} \frac{k_0}{e} \frac{T}{x_\phi} \left[ 1 + 0,2 \left( \frac{e\alpha_\phi}{k_0} \right) - \frac{x_e}{x_\phi} \left\{ 1 + 0,7 \left( \frac{e\alpha_\phi}{k_0} \right) - 0,2 \left( \frac{e\alpha_\phi}{k_0} \right)^2 - 1,8 \left( \frac{e\alpha_\phi}{k_0} \right)^3 \right\} \right] i_x \sin^2 \theta;$$

and 3) for the longitudinal-transverse galvanomagnetic effect

$$\frac{dT}{dz} = \frac{1}{2} \frac{k_0}{e} \frac{T}{x_\phi} \left[ 1 + 0,2 \left( \frac{e\alpha_\phi}{k_0} \right) - \frac{x_e}{x_\phi} \left\{ 1 + 0,7 \left( \frac{e\alpha_\phi}{k_0} \right) - 0,2 \left( \frac{e\alpha_\phi}{k_0} \right)^2 - 1,8 \left( \frac{e\alpha_\phi}{k_0} \right)^3 \right\} \right] i_x \sin \theta \cos \theta,$$

where  $\alpha_\phi$  is the differential thermo-emf from the "drag" effect ( $\alpha_\phi < 0$ );  $\mu_0$  is the "lattice" mobility;  $\theta$  is the angle between the magnetic field and the primary electric current;  $k_0$  is the Boltzmann constant;  $x_e$ ,  $x_\phi$  are the electron and phonon thermal conductivities without taking "drag" into account; and  $H$  is the magnetic-field strength. The adiabatic corrections increase with a decrease in temperature as  $T^{-1}$ . The angular dependence of the galvanomagnetic effects is insignificant. Orig. art. has: 3 formulas.

SUB CODE: 20/ SUBM DATE: 25May65/ ORIG REF: 002/ OTH REF: 005

Card 2/2

SAMSONOV, B. D.

"Contribution to the Study of Brown Forest Soils of Caucasus," Pedology, No. 1-2, 1943.

SAYTSEV, B. D.

19993 SAYTSEV, B. D. Opyt kolichestvennogo Vyrazheniya organicheskogo veshchestva v pochve. Doklady Akad. nauk SSSR, Novaya Seriya, t. LXVII, No. 1, 1949, s. 135-37.

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.

SAYUN, M.G.

137-58-4-8617

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 327 (USSR)

AUTHOR: Sayun, M.G.

TITLE: Cooperation Between the Chemical Analysis Laboratory of an Institute and Plant Laboratories (Sodruzhestvo khimiko-analiticheskoy laboratorii instituta s zavodskimi laboratoriyami)

PERIODICAL: Sb. tr. Vses. n.-i. in-ta tsvetn. met., 1956, Nr 1, pp 225-228

ABSTRACT: Technical assistance to laboratories in various establishments begins with a study of the chemical composition of the items to be analyzed and the unification of the methods of analysis. A fast nitrogen chromate method of Pb analysis was introduced into the practice of the Zyryanova, Leninogorsk, Belousov, and other laboratories. A high-speed fluoriodide method of identifying Cu was introduced at the Irtysh Copper Smelting Plant, increasing the productivity of the laboratory staff eightfold. The introduction of polarographic analysis made it possible to assign 50% of all quantitative analyses to this method. The introduction of spectrographic analysis for determination of impurities in ingot Cd at the Ust'-Kamenogorsk

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137-58-4-8617

Cooperation Between the Chemical (cont.)

Plant made it possible to cut the time required for analysis from two days to forty minutes. Colorimetry and photolorimetry have come into wide use. Analysis for  $\text{SiO}_2$  and Al by the colorimetric method in Pb and Cu melt slags has made it possible to reduce analysis time from 8-12 hours to 40-60 minutes. Rational methods of analysis for Pb, Zn, Cu, and Cd in various metallurgical products and ores are now being applied.

V. N.

1. Laboratories--Cooperation--USSR
2. Chemical analysis--Equipment

Card 2/2

SAYUN, M. G.

AUTHORS: Sayun, M.G., Kondratyev, V.M. 32-8-57/61

TITLE: Consultative Assembly of the Collaborators of the Chemical-Analytical Laboratories, Plants Dealing with the Metallurgy of Non-Ferrous Metals of the Kazakh SSR for the Determination of Rare and Dispersive Elements. (Soveshchaniye rabotnikov khimiko-analiticheskikh laboratoriy, predpriyatiy tsvetnoy metallurgii Kazakhskoy SSR po opredeleniyu redkikh i rasseyannykh elementov)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8, pp. 1009-1010 (USSR)

ABSTRACT: The above assembly was held at Ust'-Kamenogorsk from the 8th to the 11th May 1957. It was attended by 140 delegates. A total of 20 lectures and reviews was delivered. The lecture delivered by V.I. Plotnikov (Allunion Institute of Scientific Research for Non-Ferrous Metals) on the application of radioactive isotopes for the determination of rare metals is mentioned in the first place. Next, mention is made of a lecture delivered by V.I. Lysenko (of the same institute) on "Polarographic Determinations of the Indium and Thallium Content in Ores and their Products" etc.

The representatives of laboratories of the zinc-lead combine in Ust'-Kamenogorsk, of the polymetal combine of Leninogorsk, of the lead works at Chinkant, of the Kazakhstan geological administration and the Kazakhstan prospecting authorities for non-ferrous metals

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Consultative Assembly of the Collaborators of the Chemical- 32-8-57/61  
Analytical Laboratories, Plants, Dealing with the Metallurgy of Non-Ferrous  
Metals of the Kazakhstan SSR for the Determination of Rare and Dispersive  
Elements.

as well as the Altay prospecting authorities for non-ferrous  
metals were offered an opportunity of exchanging views and  
opinions concerning the aforementioned fields.

In the course of discussions concerning lectures delivered it was  
stated that the scientific research institutes concerned carried  
out very unsatisfactory research work within the fields of  
analytical chemistry of rare metals as well as with respect to  
the elaboration of new and accelerated methods. Also the exchange  
of experience and information was criticized as unsatisfactory, and  
the same was the case with respect to the equipment of the labora-  
tories concerned.

AVAILABLE: Library of Congress

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SAYUN, M. G. Cand Chem Sci -- (diss) "Study of the process of the electrolysis of salts of indium with <sup>^</sup>mercury electrode~~l~~." Alma-Ata, 1958. 16 pp with graphs (Kazakh State Univ im S. M. Kirov). (KL, 52-58, 99)

5(2)

AUTHORS:

Sayun, M. G., Tsyb, P. P., Latkher, K. Kh.

SOV/32-24-12-7/45

TITLE:

Separation of Zinc From Indium Using Electrolysis With a Mercury Electrode (Otdeleniye tsinka ot indiya elektrolizom s rtutnym elektrodom)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol 24, Nr 12, pp 1436-1439 (USSR)

ABSTRACT:

The possibility of applying the amalgam method in the separation of zinc from indium is shown. This method is widely used analytically and has been applied to the analysis of several metals (Ref 1). In the experiments reported here the experimental apparatus (Table 1) included a mercury or amalgam electrode and a platinum spiral as the second electrode. The electrodes were separated by a distance of 3 cm and the electrolyte volume was 80 ml. The zinc determination was carried out using the volumetric ferrocyanide method and the radiometric method using radioactive  $Zn^{65}$  isotopes with a half-life periode of 250 days. Indium was determined polarographically. A MS-7 counter was used in the radiometric determination. Several polarograms (Fig 2) are given to explain the possibility of separating zinc from indium electrolytically as in the present experiments. From the experimental results obtained it may be concluded that a

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SOV/32-24-12-7/45

Separation of Zinc From Indium Using Electrolysis With a Mercury Electrode

separation of zinc from indium is possible in an anodic polarization, i.e. in electrolytic decomposition. A table of experimental results shows that at 20° 8.1% of the 9% of zinc in the amalgam goes into solution after 5 minutes, while with an increase in temperature to 80° the entire amount of zinc present goes into solution. An increase in the indium concentration in the amalgam makes the zinc dissolution more difficult. An analytical procedure was worked out according to the results of the studies made.- There are 3 figures, 1 table, and 1 Soviet reference.

ASSOCIATION: Gorno-metallurgicheskii institut tsvetnykh metallov  
(Mining-Metallurgical Institute for Nonferrous Metals)

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5(2)

AUTHORS:

Sayun, M. G., Tsyb, P.P.

SOV/32-25-7-7/50

TITLE:

Electrolytic Separation of Indium, Thallium, Zinc, Cadmium and Their Definition From a Weighed-in Substance (Elektroliticheskoye otdeleniye indiya, talliya, tsinka i kadmiya i ikh opredeleniye iz odnoy naveski)

PERIODICAL:

Zavodskaya laboratoriya, 1959, Vol 25, Nr 7, pp 793-795(USSR)

ABSTRACT:

In the previous papers (Re's 1-3) the separation of In and Tl from several elements by means of an electrolysis with an Hg-electrode was described. Since Zn and Cd among other elements, have to be defined apart from In and Tl in the analysis of various products of heavy nonferrous metallurgy, the possibilities of applying the above mentioned method for the separation and determination of weighed-in In and Tl were investigated in the present case. In an electrolytic decomposition of an amalgam which contains the elements mentioned last, Zn will first of all change into the electrolyte, then follows the common dissolution of Cd, Tl and In. After that follows a potential jump to the value necessary for the oxidation of Cu and Fe. This fact was evaluated in the development of the present method. For the experiments carried out, samples of

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